

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-49. (Canceled)

50. (Currently Amended) A method of representing performance of a drug candidate, the method comprising:

receiving raw data generated by a model of drug candidate behavior, the raw data comprising index information, treatment scenario input information types, and corresponding output performance information types;

extracting the index information from the raw data;

referencing the extracted index information to generate a metadata file, a structure of the metadata file explicitly reflecting a hierarchical structure of the model;

referencing the metadata file to convert the raw data file into a binary file, the metadata file explicitly identifying locations of treatment scenario information types and the output performance information types within the binary file;

generating a user interface from the metadata file, the interface comprising a menu of input variables;

presenting the menu to a user;

receiving a user-selected input at the interface;

causing the interface to reference the metadata file and the binary file to identify a subset of the binary file relevant to the user-selected input; and

presenting the data subset in one of a select type of presentation formats at the interface, wherein the presented data subset is used for developing the model of the drug candidate's clinical safety, tolerability, and efficacy profile in relation to a competitor compound.

51. (Previously Presented) The method of claim 50 wherein the data subset represents a clinical effect.

52. (Previously Presented) The method of claim 50 wherein the data subset represents a likelihood of a clinical effect lying within a range of user-defined value.

53. (Previously Presented) The method of claim 50 wherein the data subset represents a value of an independent variable required for a clinical effect to attain, exceed, or equal a user-defined value.

54. (Previously Presented) The method of claim 50 wherein the data subset represents a value of an independent variable required for a clinical effect to fall within, above, or below a user-defined range of values.

55. (Previously Presented) The method of claim 50 wherein the presentation format comprises a table.

56. (Previously Presented) The method of claim 50 wherein the presentation format comprises a matrix of tables.

57. (Previously Presented) The method of claim 50 wherein the presentation format comprises a plot.

58. (Previously Presented) The method of claim 50 wherein the presentation format comprises a matrix of plots.

59. (Previously Presented) The method of claim 50 wherein the data subset represents a contrast between output corresponding to two controllable variable input scenarios.

60. (Previously Presented) The method of claim 59 wherein the data subset represents a contrast between output corresponding to a first controllable variable input scenario featuring the drug candidate, and a second controllable variable input scenario featuring a competitor of the drug candidate.

61. (Previously Presented) The method of claim 59 wherein the contrast represents one of a difference, a ratio, and a log ratio.

62. (Previously Presented) The method of claim 50 wherein the menu of input variables is selected from the group consisting of an endpoint, a controllable variable, and an uncontrollable variable.

63. (Previously Presented) The method of claim 62 wherein endpoint is based upon a clinically measured value.

64. (Previously Presented) The method of claim 62 wherein the controllable variable is selected from the group comprising drug candidate identity, drug candidate dose, frequency of administration of drug candidate, and formulation of the drug candidate.

65. (Previously Presented) The method of claim 62 wherein the uncontrollable variable comprises a patient attribute selected from the group consisting of age, gender, body weight, and disease state.

66. (Previously Presented) The method of claim 62 wherein the uncontrollable variable comprises a model assumption.

67. (Previously Presented) The method of claim 50 wherein the raw data comprises a file organized according to explicit index values, and the metadata file encodes the explicit index values into a structure.

68. (Previously Presented) The method of claim 67 wherein the raw data comprises multiple files.

69. (Previously Presented) The method of claim 67 wherein the raw data is converted into the single binary file organized to match the encoded structure.

70. (Previously Presented) The method of claim 67 wherein the raw data is converted into multiple binary files organized to match the encoded structure.

71. (Previously Presented) The method of claim 67 wherein the explicit index values are encoded into an ordered tree structure.

72. (Previously Presented) The method of claim 71 wherein the binary file comprises an n-dimensional structure having a geometry matching the tree structure.

73. (Previously Presented) The method of claim 50 wherein the menu comprises text from the Metadata file.

74. (Previously Presented) The method of claim 50 further comprising drafting an additional conversion routine configured to recognize the raw data structure, and to transform the raw data into a standard metadata file format.

75. (Currently Amended) A computer system comprising a processor and a memory storing code to operate the processor, the code comprising,

    a parser module configured to receive raw data output by a model of drug candidate behavior, and to generate a metadata file encoding outputs and related inputs of the model based upon index information extracted from the raw data;

    a data transfer module configured to convert the raw data into a binary file organized to match a structure encoded in the metadata file; and

    a graphic user interface configured to present a menu of input variables to a user, to receive inputs selected by the user, to reference the metadata file and the binary file to identify a subset of the binary file relevant to the selected inputs, and to present the data subset in one of a select type of presentation format, wherein the presented data subset is used for developing the model of the drug candidate's clinical safety, tolerability, and efficacy profile in relation to a competitor compound.

76. (Previously Presented) The computer system of claim 75 wherein the raw data comprises:

    an index file having row vectors including a row number, the row vectors describing unique modeling input scenarios, and

    a simulation output file comprising columns of number distributions produced by the model when run through a simulation process utilizing the specific input scenario, a column number corresponding to the row number; and wherein,

the metadata file is organized according to a tree structure, and the binary file is organized into an n-dimensional structure whose geometry matches the tree structure.

77. (Previously Presented) The computer system of claim 75 wherein the parser module further comprises a conversion routine configured to recognize a format of the model, and to transform the raw data into a standard format of the metadata file.